	Application No.	Applicant(s)
Notice of Allowability	10/053,544	MUKAI ET AL.
	Examiner	Art Unit	
	Huy D. Nguyen	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *11/09/2005*.

2. ☒ The allowed claim(s) is/are *3-5,8,20,21 and 24*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

       1. ☒ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Eckhard H. Kuesters on 6/24/2005.

The application has been amended as follows:

Claims 7, 9-11, and 29 have been canceled.

2.   The following is an examiner's statement of reasons for allowance:

Claims 3-5, 8, 20-21, and 24 have been rewritten as independent forms including all of

the limitations of the base claim. Therefore, claims 3-5, 8, 20-21, and 24 are now allowable with

the same reason set forth in the previous office action (action 12082004).

Regarding claim 3, the closest prior arts, Davenport and Khawer (US 2002/0122384), fail

to teach that the signal processing device comprises: at least one programmable hardware device

serving as a part of said resource and including a circuit structure capable of being redefined

according to a set of a plurality of logic circuits which carry out basic calculations of at least a

part of said signal processing; and a general-use processor serving as another part of said

resource and configured to carry out at least another part of said signal processing by executing a

predetermined program; and said controller determines respective shares of processing to be

executed by said programmable hardware device and the general-use processor in accordance

with the contents of said signal processing and controls said signal processing device to define,

to the resource, the signal processing functions in accordance with determination of the share, in

combination with all of other limitations in the claim.

Regarding claims 4-5, the closest prior arts, Davenport and Khawer (US 2002/0122384),

fail to teach that the signal processing device comprises: at least one programmable hardware

device serving as at least a part of said resource and including a circuit structure capable of being

redefined according to a set of a plurality of logic circuits which carry out basic calculations of at

least a part of said signal processing; a first memory which stores a program indicating a

procedure of said signal processing; a second memory which stores a plurality of circuit structure

descriptions of said programmable hardware device corresponding to processing contents

respectively, the circuit structure descriptions being used for said signal processing device to

carry out said signal processing; and a program sequencer configured to control the

programmable hardware device and said second memory to revise the circuit structure

descriptions of said programmable hardware device in accordance with the program read out

from said first memory under a control of said controller, in combination with all of other

limitations in the claim.

Regarding claim 8, the closest prior arts, Davenport and Khawer (US 2002/0122384), fail

to teach that: (a) said controller acquires structure description information provided from outside

of said radio communication apparatus via said wireless transmitter-receiver device, the structure

description information indicating a structure of said newly requested signal processing function;

(b) said controller obtains a resource amount necessary for defining, to the resource, the newly

required signal processing function of the resource with use of the acquired structure description

information; (c) said controller compares said resource amount obtained and an initial resource

amount preset in said signal processing device with each other; (d) said controller grasps said

excessive source amount when the obtained resource amount is smaller than the initial resource

amount; (e) said controller determines if it is possible to additionally define said newly requested

signal processing function to said resource by comparing the grasped excessive resource amount

with the resource amount necessary for defining, to the resource, the newly required signal

processing function of the resource; and (f) said controller executes an additional definition when

it is determined that the additional definition can be done, in combination with all of other

limitations in the claim.

Regarding claims 20-21, the closest prior arts, Davenport and Khawer (US

2002/0122384), fail to teach that the storage device stores a version of each of said plurality of

software modules in the table as a use log of each of the software modules; and said controller

controls said storage device to compare a version of at least one software module corresponding

to a signal processing function to be executed by said signal processing device with the versions

of the software modules stored in said storage device with reference to the table, and when the

versions of these software modules are equal to each other, said controller reads the software

modules from said storage device and assigns the read-out modules to said signal processing

device, in combination with all of other limitations in the claim.

Regarding claim 24, the closest prior arts, Davenport and Khawer (US 2002/0122384),

fail to teach that the second converter device converts at least one of the second data files stored

in said storage device into a first data file having a file format corresponding to unique

application software prepared for said predetermined one mobile communication system, when

said controller reads out the software module corresponding to said predetermined one of the

radio communication systems from said storage device and assigns the read-out software module

to said signal processing device, in combination with all of other limitations in the claim.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for
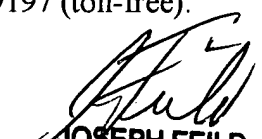
Allowance."

Contact Information

3.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Huy D. Nguyen whose telephone number is 571-272-7845. The

examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huy Nguyen

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER